

Amendment to the Claims:

1. (Previously Presented) A spectroscopic analysis apparatus, for analysing an object comprising:

- an excitation system which emits an excitation beam to excite a target region,

- a beam separation unit which separates at least part of elastically scattered radiation from inelastically scattered radiation, said scattered radiation being generated by the excitation beam at the target region,

- a monitoring system which generates an image of the target region using the scattered radiation and which defines a region of interest in said image,

- a detection system which detects scattered radiation from the defined region of interest generated by the excitation beam and

- a control unit which at least one of:

controls the excitation system such that only the defined region of interest of the target region is excited, and

controls the detection system such that only the scattered radiation from the defined region of interest is detected.

2. (Previously Presented) The analysis apparatus as claimed in claim 1, wherein said monitoring system distinguishes between blood and non-blood image portions using contrast information in the image.

3. (Previously Presented) The analysis apparatus as claimed in claim 1, wherein said monitoring system distinguishes between different image portions using spectral information in the scattered radiation.

4. (Previously Presented) The analysis apparatus as claimed in claim 1, wherein said detection system comprises:

a filter which separates high frequency spectral portions in a Raman signal, which high frequency spectral portions include contributions from protein and water, from low frequency spectral portions, which low frequency spectral portions include a fingerprint spectral region.

5. (Previously Presented) The analysis apparatus as claimed in claim 1, wherein said monitoring system emits a monitoring beam to image the target region.

6. (Previously Presented) The analysis apparatus as claimed in claim 5, further comprising:

a radiation source which emits the excitation beam; and

an optical separation system which separates the scattered radiation and the excitation beam from the inelastically scattered radiation.

7. (Previously Presented) The analysis apparatus as claimed in claim 1, wherein said monitoring system includes:

a confocal scanning laser microscope, said detection system having a confocal relationship with the confocal scanning laser microscope.

8. (Previously Presented) The analysis apparatus as claimed in claim 1, wherein said monitoring system includes:

an orthogonal polarised spectral imaging arrangement.

9. (Previously Presented) The analysis apparatus as claimed in claim 1, wherein said control unit controls said excitation system to distribute the excitation beam over the defined region of interest.

10. (Previously Presented) The analysis apparatus as claimed in claim 1, wherein the defined region of interest corresponds to blood and said control unit based on the images generated by the monitoring system controls said detection system to:

block inelastically scattered radiation from parts of the target region corresponding to tissue other than blood and

detect only inelastically scattered radiation from the defined region of interest such that the detection system detects only inelastically scattered radiation from blood.

11. (Currently Amended) An analysis method, in particular a spectroscopic analysis method, for analysing an object comprising the steps of:

-sweeping an excitation beam across a target region that contains a defined region of interest

- emitting an excitation beam to excite [[a]] the target region,

- separating at least part of elastically scattered radiation from inelastically scattered radiation, said scattered radiation being generated by the excitation beam at the target region,

- generating an image of the target region using at least one of the elastically scattered [[or]] and the inelastically scattered radiation,

- defining [[a]] the region of interest in said image,

- at least one of (a) controlling the excitation system such that only the defined region of interest of the target region is excited and/or and (b) controlling the detection system such that only signals from the defined region of interest of the target region are detected, and

- detecting and analyzing only scattered radiation from the defined region of interest generated by the excitation beam.

12. (Currently Amended) The method as claimed in claim 11, wherein the target region is a section of anatomy and the defined region of interest corresponds to blood.

13. (Previously Presented) The method as claimed in claim 12, wherein the controlling step at least one of:

controls the exciting step to excite only the blood in the target region, and

controls the detecting step to detect only scattered radiation from the blood in the target region.

14. (Previously Presented) The method as claimed in claim 13, further including:

spectrally analyzing the inelastically scattered radiation, such that the spectrally analyzed inelastically scattered radiation is only generated by the excitation beam in the blood in the target region.

15. (Currently Amended) A spectroscopic analysis apparatus comprising:

a excitation unit which emits an excitation beam to excite a target region, the excitation beam exciting scattered radiation including elastically scattered radiation and inelastically scattered radiation, from the target region;

a monitoring system which generates an image of the target region from the scattered radiation, distinguishes between different image portions using contrast or spectral information, and defines a region of interest of the target region based on a selected one of the distinguished image portions;

an optical system which

moves the excitation beam across the target region,

directs the scattered radiation to the monitoring system,

separates at least a portion of the inelastically scattered radiation from the scattered radiation;

a detection unit which spectroscopically analyzes the inelastically scattered radiation from the region of interest separated by the optical system; and

a control unit which controls at least one of:

the optical system to move the excitation beam such that the radiation beam excites only the defined region of interest of the target region, and

controls the detection unit to spectrally analyze only the inelastically scattered radiation scattered from the defined region of interest.

16. (Currently Amended) The apparatus as claimed in claim 15, wherein the selected-distinguished-image portion defined region of interest is a blood vessel such that the detection system only spectrally analyzes the radiation inelastically scattered by blood in the target region.

17. (New) The apparatus as claimed in claim 15, wherein the control unit controls the optical system to move the excitation beam such that the radiation beam excites only the defined region of interest of the target region.

18. (New) The apparatus as claimed in claim 15, wherein the control unit controls the detection unit to spectrally analyze only the inelastically scattered radiation scattered from the defined region of interest.